

Women's Health

Breast cancer is the most commonly diagnosed cancer and the second leading cause of cancer deaths among women in the United States. It is estimated that one in ten women will develop breast cancer during her lifetime. The risk increases with advancing age. Other risk factors include family and/or personal history of breast cancer, benign breast disease, and hormonal factors, such as early-age menstruation or late-age menopause. Research indicates that death due to breast cancer can be reduced through early detection due to the use of mammograms and clinical breast examinations. The five-year survival rate for breast cancer increases from 75% to 90% for cases diagnosed at an early stage. However, the benefits of breast cancer screening to reduce mortality in the population can only be achieved if screening guidelines are followed and large proportion of women receive screening examinations regularly. The American Cancer Society recommends that all women aged 40 and over have annual mammograms and clinical breast exams. Women between 20 and 39 should have a clinical breast exam every three years. BRFSS survey questions were asked to estimate the Lancaster County specific proportions of women aged 40 and over who reported receiving a mammogram. Each respondent was asked, "Have you ever had a mammogram?" If the answer was "yes" she was then asked, "How long has it been since your last mammogram?" Similar questions were asked about receiving a clinical breast exam.

Cancer of the uterine cervix is one of the more frequently occurring cancers among women. The majority of cervical cancer deaths occur in women 65 years of age and older. However, all women are at risk. Periodic Pap smear tests can effectively detect cervical cancer. Between 1992 and 1995 the number of deaths from cervical cancer declined by 74 percent due to increased use of the Pap smear test by American women. The American Cancer Society recommends annual Pap smear for all women who are, or have been, sexually active or have reached age 18. After three or more annual smears have been normal, Pap smears should be done every three years, unless more frequent testing is recommended by a health care provider. After hearing a description of a pap smear, female BRFSS respondents were asked if they had ever had a pap smear. Those who answered "yes" were then asked how long it had been since their last test.

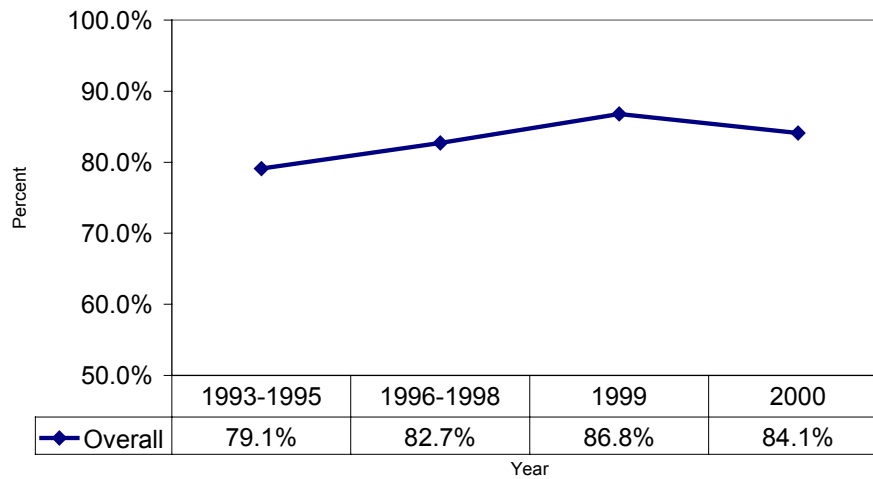
Women who ever had a mammogram

A total of 42,620 (84.1% of 50, 678 women of age 40 and over) adult women in the Lancaster County had gone for a mammogram at some point in their life, according to 2000 BRFSS survey (95% CI, 80.9% - 87.3%). More than 4,000 women (8.6% of 50, 678 women of age 40 and over) of the same age group never had this screening test (95% CI, 6.2% - 11%); 87.6 percent (95% CI, 84.6% - 90.6%) of those who had a mammogram had it within the past two years.

Mammography Trends

Mammography use among women aged 40 years and older has increased in Lancaster County in recent years. The proportion of women who ever had a mammogram increased from 79 percent in the 1993-1995 to 86.8 percent in 1999. In 2000, it then dropped slightly to 84 percent (Fig.104 a).

Fig.104a : Women Who Ever Had a Mammogram



Obtaining a mammogram within the past two years also has increased over the years. The proportions of women who had a mammogram within the in past two years of survey was 79 percent in 1993-1995, 86.1 percent in 1996-1998, and 90 percent in 1999 (Fig.104b).

Women with higher education attainment were more likely to report having a mammogram. According to the 2000 survey, 88 percent of the respondents with a college education reported having a mammogram compared to only 64 percent of respondents with “some high school or less education.” The rate was also lower for high school graduates (81%) compared to respondents with some college education (90%, Fig.105a).

Fig.104b: Women Who Had Mammogram in Past 2 Years

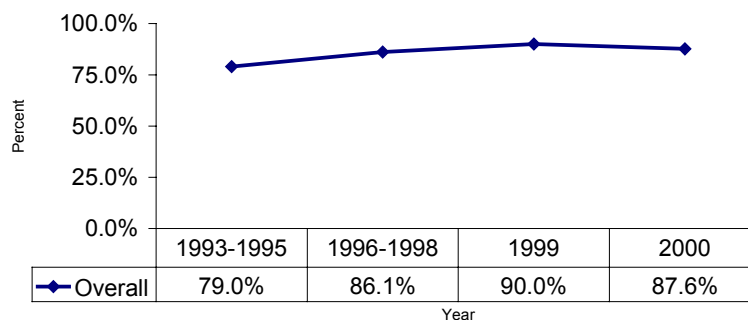
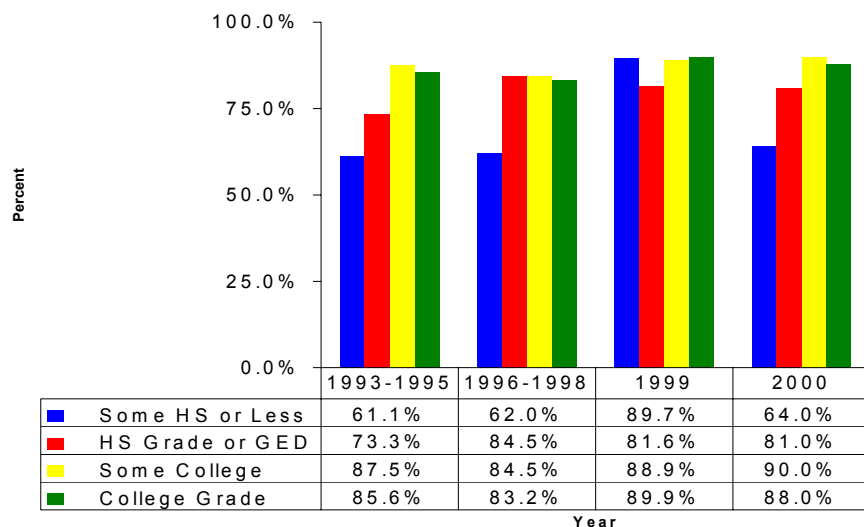
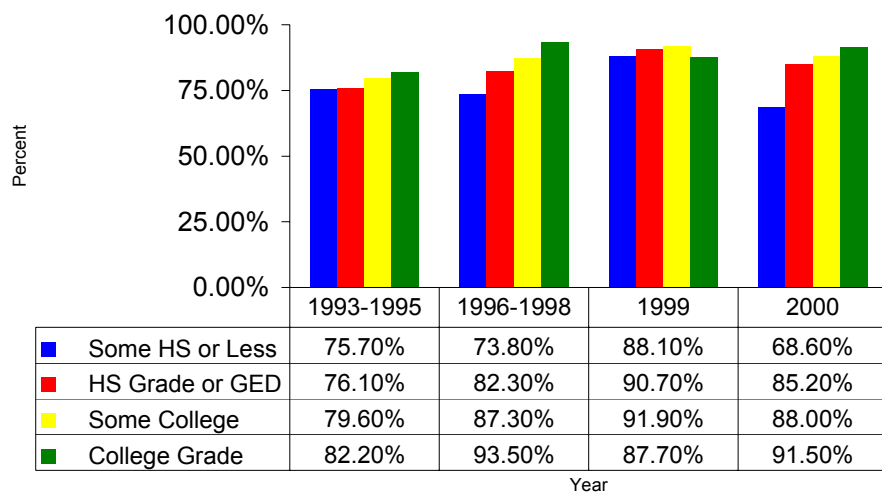


Fig 105a: Women Who Ever Had a Mammogram by Education



When asked, “How long back it was done,” a higher proportion of women with better education (91.5%) reported to have had the exam with in the past two-years (Fig.105b).

Fig.105b: Women Who Had a Mammogram in Past Two Years by Education



Only 68.6 percent of women “with some high school education” had a mammogram within the past two years compared to 91.5 percent of college graduate women. At the same time, 85.2 percent of high school graduates had had the exam within the past two-years compared to 88 percent of women with some college education.

Non-white adult women were less likely to receive a mammogram than white women. Fig.106a shows the mammogram rates for white and non-white women. In 2000, the proportion of non-white women who ever had a mammogram was almost half (46% vs. 85.7%) that of white women. Non-white women were also less likely than white women to obtain it with in the past two years (Fig.106b)

Fig.106a: Women Who Ever Had a Mammogram by Race

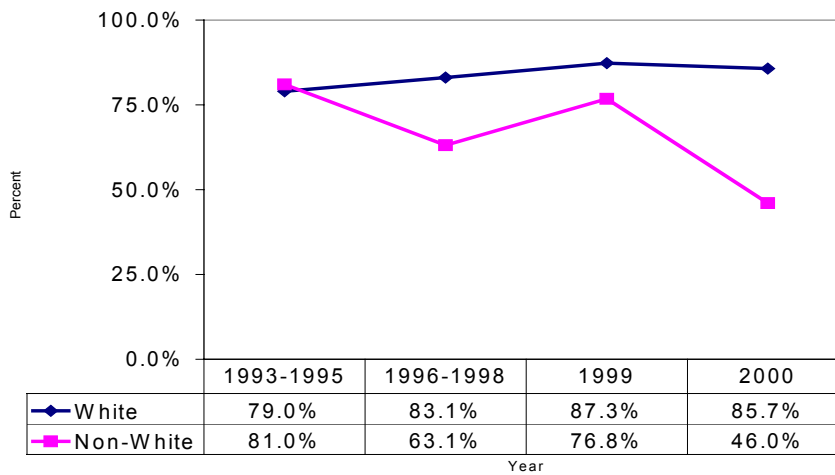
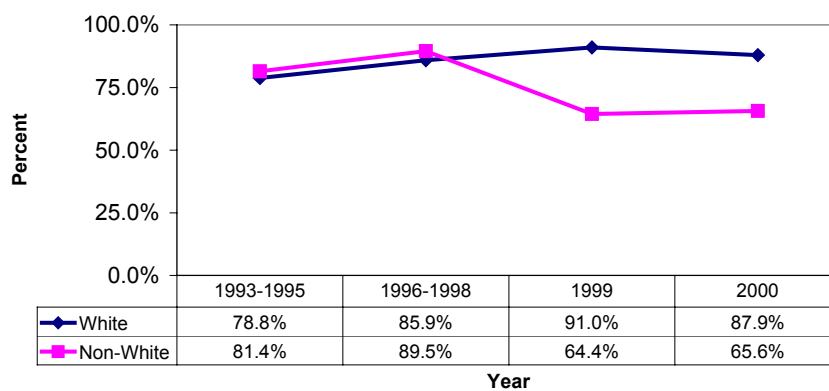


Fig.106b: Women Who Had Mammogram in Past Two Years by Race



Higher income was associated with higher rates of mammography. Only 68.2 percent of respondents with an income of less than \$10,000 reported having a mammogram, whereas 93.8 percent of respondents with an income of \$50,000 or more reported never to have received this screening test (Fig.107). No trend was evident due to age differences of the respondents (Table 32).

Fig.107: Women Who Ever Had a Mammogram by Income

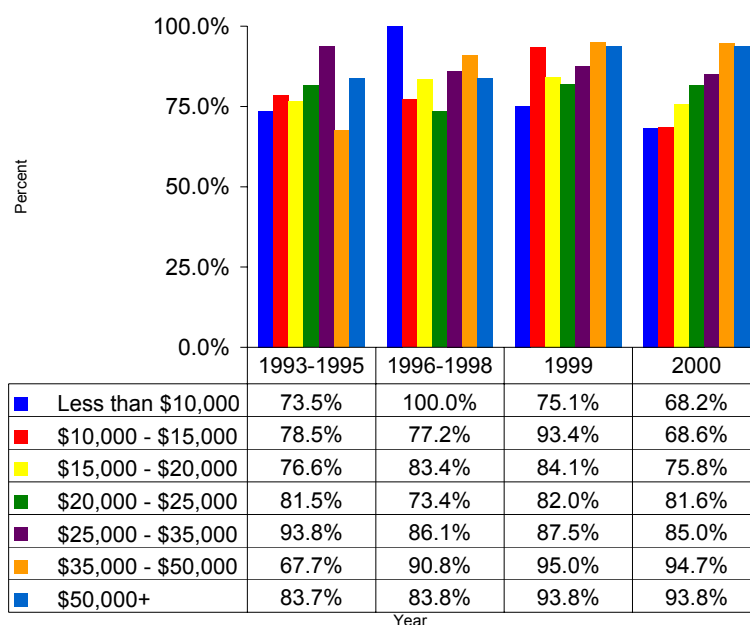


Table 32: Women Who Never Had a Mammogram

Year	1993-1995	1996-1998	1999	2000
Age group				
40-49	74.1%	77.6%	88.9%	83.7%
50-59	84.2%	91.2%	93.7%	89%
60-69	90.7%	90.2%	89.7%	84.6%
70+	73.8%	77.2%	78.2%	79.9%

Women who ever had a clinical breast exam

A clinical breast exam (CBE) is an exam in which a doctor, nurse, or other medical professional feels breasts to detect of any type of lumps. About 78,787 women aged 18 and above (81.7% of 96,435 women of age 18 and over) in Lancaster County had a CBE exam (95% CI, 79% - 84.4%), and about 72,2247 women (91.7% of 78,787 women) had the exam with in the past two years (95% CI, 89.6% - 93.8%).

Prevalence and Trend

Prevalence of having a CBE appeared to have slightly declined in the 2000 period after remaining somewhat stable over seven years. Rates of having a CBE ranged between 88 and 90 percent from 1993-1995 to the 1999 survey and then dropped to 81.7 percent in 2000 (Fig.108a). However, the proportion of women who had received the exam within

the past two years remained nearly constant over the periods covered in this report (Fig.108b).

Fig.108a: Women Who Ever Had a CBE

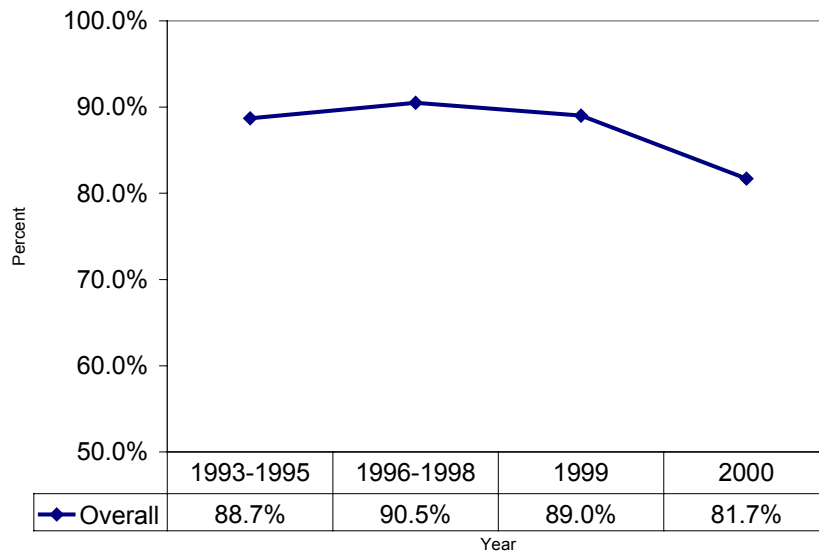
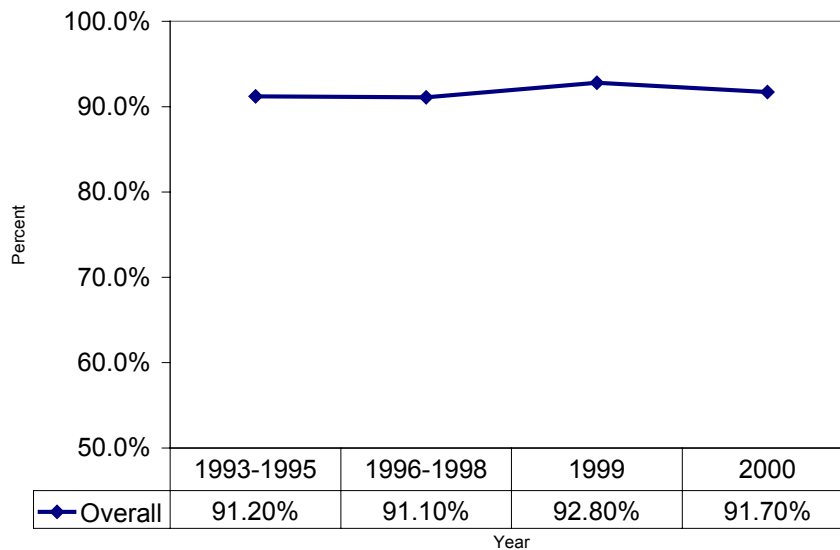
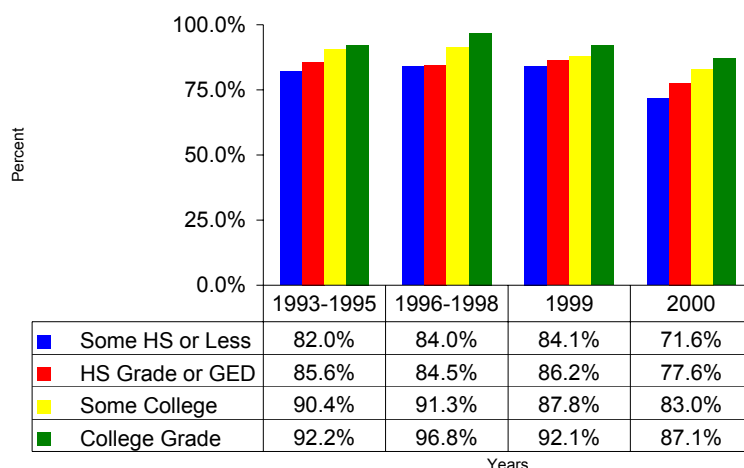


Fig.108b: Women Who Had CBE in Past Two Years



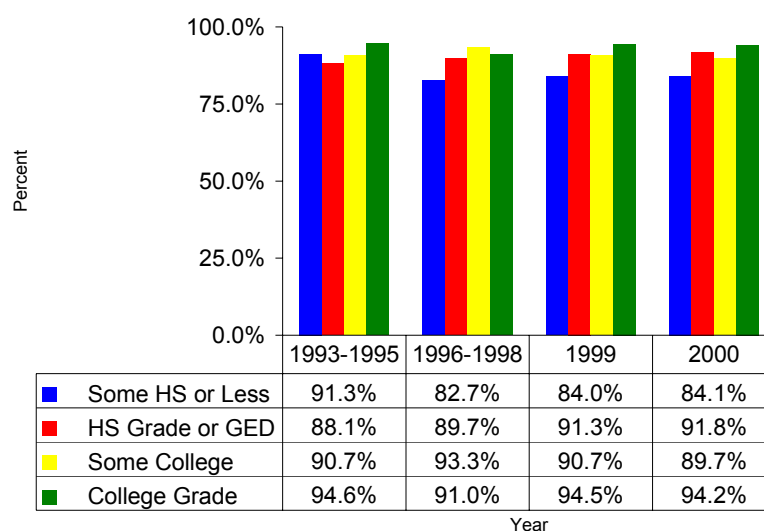
It appears that higher education levels were associated with higher rates of clinical breast examination regardless of survey years (Fig.109a).

Fig.109a: Women Who Ever Had a CBE by Education



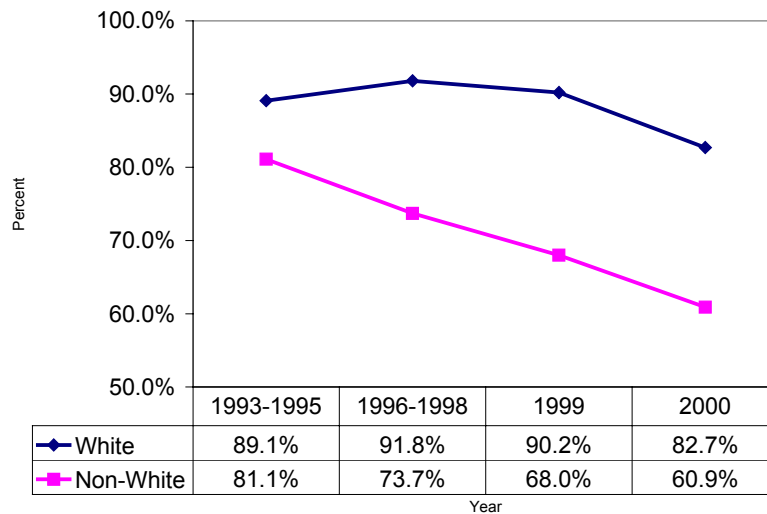
In 2000, 71.6 percent of women who had not finished high school reported to have had the CBE examination. The proportion then grew to 77.6 percent among high school graduates, 83 percent among women with some college education and 87.1 percent among women with a college diploma. College graduate women were also more likely to have a CBE within the past two years than women with lesser educational attainment (Fig.109b). Approximately 84 percent of women with “some or less high school education” said that they had their CBE within the past two years of the survey, while 94.2 percent of women who were college graduates reported having the exam within the past two years.

Fig.109b: Women Who Had CBE in Past Two Years



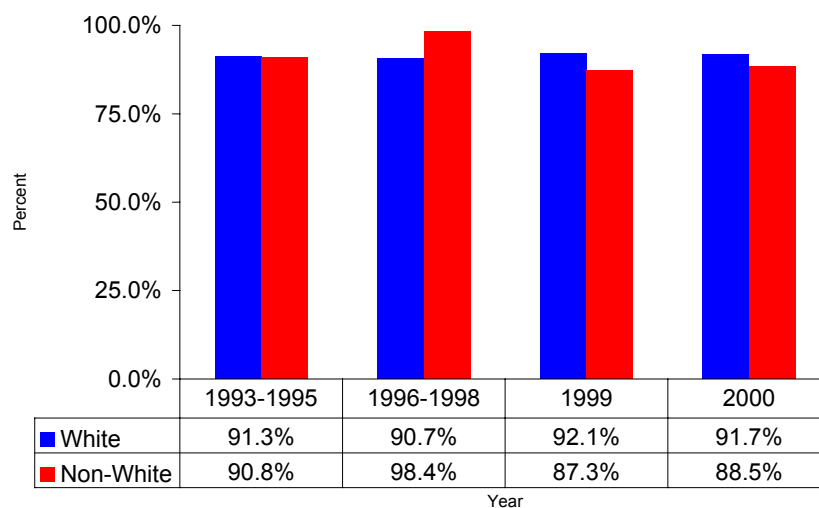
A substantial difference in CBE rates was found between white and non-white women. In Lancaster County, fewer non-white women than white women had a clinical breast examination. Approximately 61 percent of non-white women reported to having had a CBE in the 2000 survey in comparison to 82.7 percent of white women. These big differences could also be traced back to previous survey periods. Since the 1993-1995 survey period, CBE rates for non-white women have declined sharply in contrast to a slight drop in CBE rates for white women (Fig.110a).

Fig.110a: Women Who Ever Had a CBE by Race



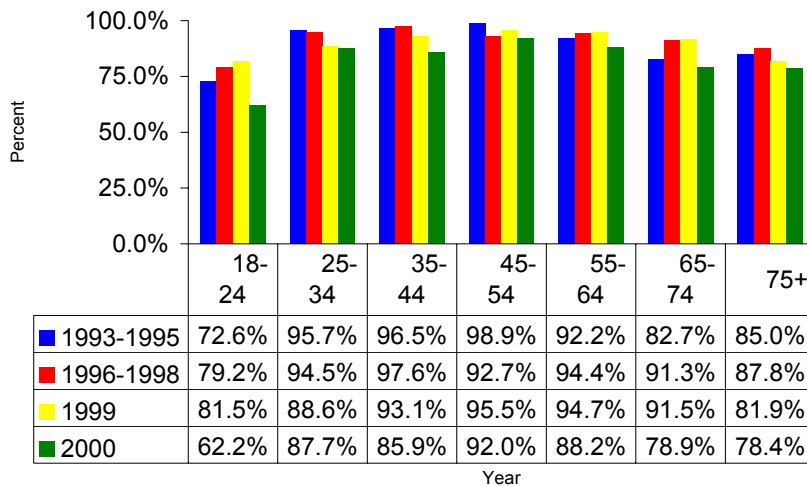
More white women (87.4%) than non-white women (85%) reported to have had a CBE within the past two years (Fig.110b).

Fig.110b: Women Who Had CBE in Past Two Years



Women respondents between the ages of 35 and 64 years were the largest segment to report having had a CBE. In 2000, CBE rates were 85.9, 92, and 88.2 percent for age groups of 35-44, 45-54, and 55-64, respectively. Rates were 62.2 percent and 78.4 percent for women who were in the age groups of 18-24 years and 75 and older (Fig.111).

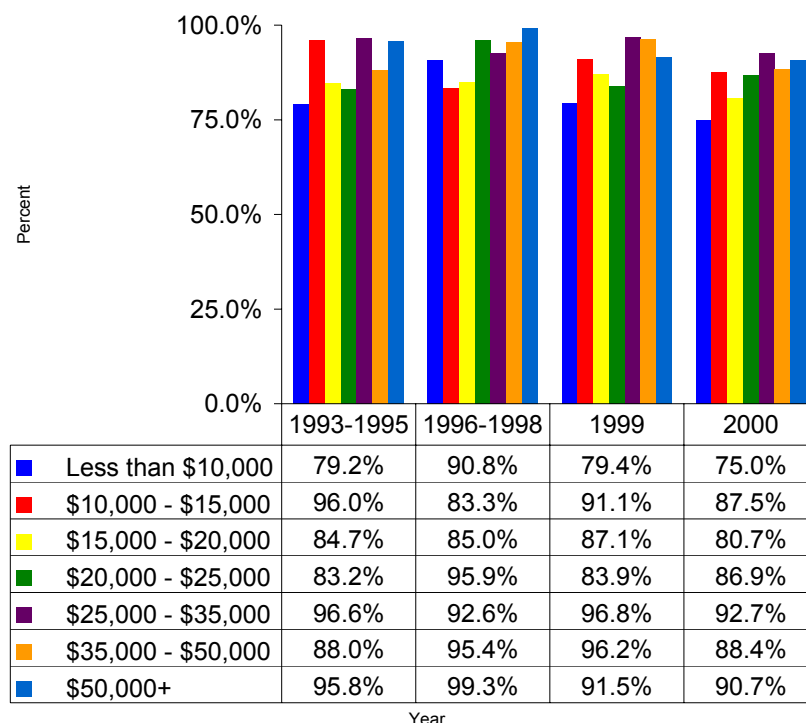
Fig.111: Women Who Ever Had a CBE by Age



Women with more income were more likely to report that they have had a CBE. More than 90 percent of women with an income of \$50,000 or more had a CBE, compared with 75 percent of women with an income of less than \$10,000. Year-by-year rates for women within the income brackets is presented in fig.112. Table 33 shows the proportions of women who had their CBE within the past two years prior to the surveys. No particular trend due to income differences was observed.

Table 33: Women Who Had a CBE in Past Two Years				
Year	1993-1995	1996-1998	1999	2000
Age Group				
18-24	100%	99%	93.1%	98.4%
25-34	95.6%	95.6%	93.5%	95.8%
35-44	89.1%	81.2%	90.1%	90.4%
45-54	86.7%	91.9%	88.1%	92.3%
55-64	95.2%	93%	91%	87%
65-74	81.8%	90.6%	95.6%	87.8%
75+	78.2%	79.5%	91.4%	80.5%

Fig.112: Women who ever had a CBE by Income



Women Who Ever Had a Pap smear

A Pap smear test is used to detect cervical cancer. In 2000, 85.9 percent (95% CI, 83.5%- 88.3%) of women aged 18 and beyond with an intact uterus (who never had hysterectomy) reported having received a Pap smear test. Among these, 87.5 percent (95% CI, 85% - 90%) had received it with in the past two years.

Prevalence and Trends

The proportion of women who had a Pap smear test at some point in their lives, dropped slightly in 2000 (Fig.113), after maintaining somewhat stable rates between the 1993-1995 and 1999 periods. The trend of having a Pap smear test with in the past two years remained steady (Fig.114).

Fig.113: Women Who Ever Had a Pap Smear Test

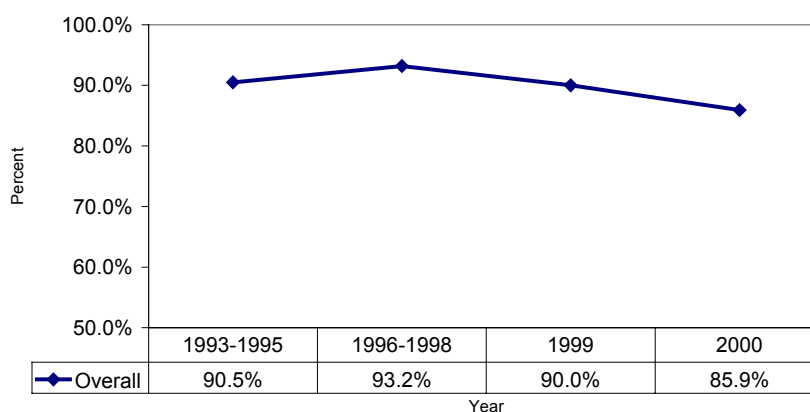
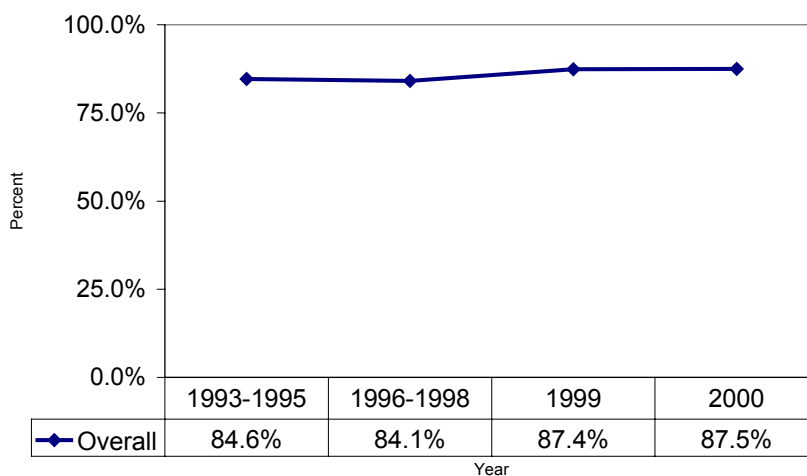


Fig.114: Women Who Had a Pap Smear in Past Two Years



Similar to other screening tests for women's health described in this report, considerable differences in the proportions of having had a pap smear test were noted between whites and non-whites. Sixty-nine percent of non-white women in the 2000 period reported getting this test done as compared to 86.8 percent of white women. Despite a downward trend for both groups, overall rates for having a pap smear remained high for whites than non-whites (Fig.115).

Fig.115: Women Who Ever Had a Pap Test by Race

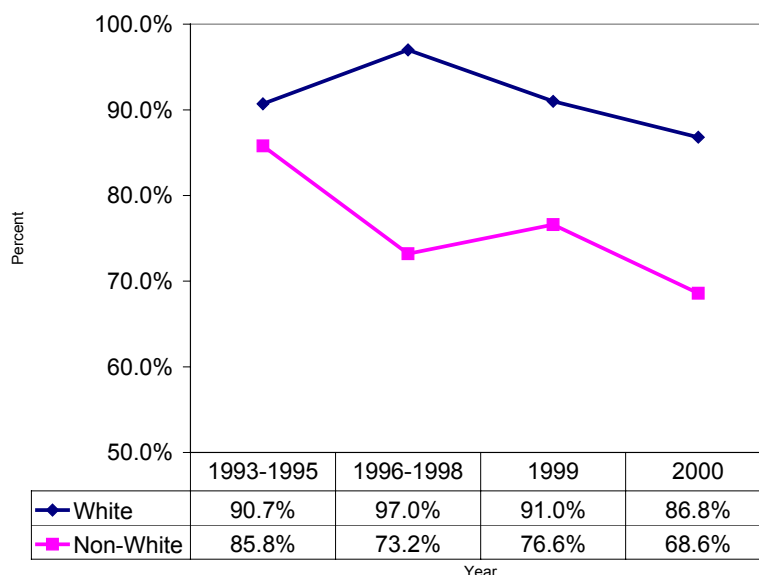


Figure 116a shows the trend of having a Pap smear test by the female respondent's educational attainment. College graduates (88.6%) and women with some college education (90.3%) had higher prevalence of having a Pap test than high school graduates (80.9%) and women with "some or less" high school education (77.2%). Among these women, those who had a college degree had the highest rate (90.7%) of having the test within the past two years followed by women (89.2%) with some college education (Fig.116b).

Fig.116a: Women Who Ever Had a Pap Test by Education

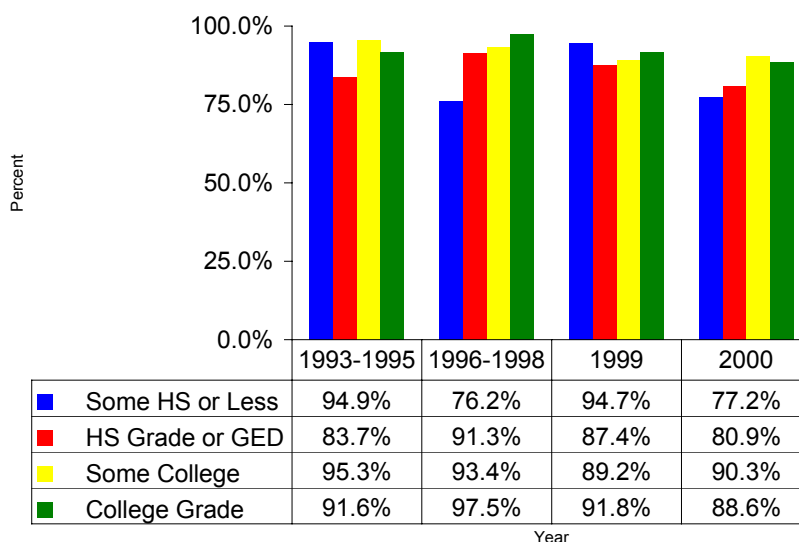
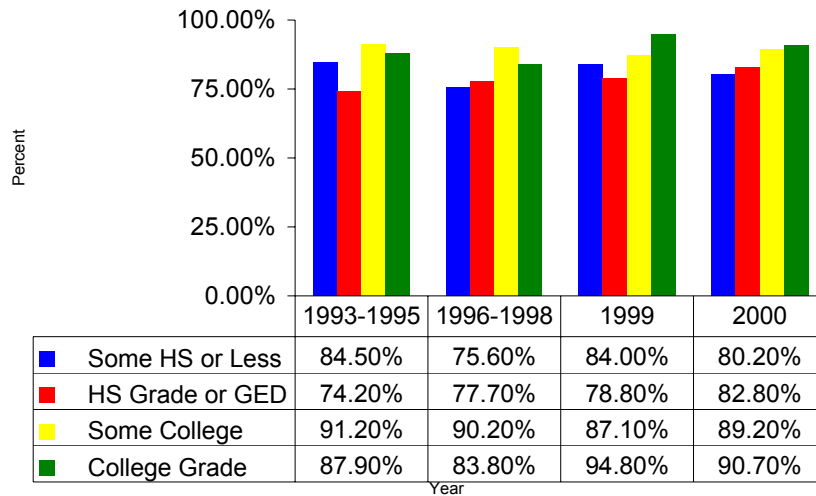


Fig.116b: Women Who Had a Pap Test Within Past Two Years By Education



Household income and age of the respondent failed to show any apparent trend in having a pap smear test (Table 34a). However, a direct relationship between age and having a pap test in past two years was apparent in all year-specific surveys. Younger adult women were more likely to have the test done within the last two years prior to the survey (Table 32b).

<i>Table: 34a: Women Who Ever Had a Pap Test</i>				
Year	1993-1995	1996-1998	1999	2000
Annual Household Income				
Less than \$10,000	89%	99%	67.1%	83.2%
\$10,000 - \$15,000	96%	78.6%	93.7%	92.2%
\$15,000 - \$20,000	84.7%	95.5%	92.7%	79.3%
\$20,000 - \$25,000	90.7%	94%	79.7%	90.5%
\$25,000 - \$35,000	94.2%	98.6%	97.6%	92.8%
\$35,000 - \$50,000	84.4%	96.4%	95.1%	90.3%
\$50,000+	97.9%	100%	95.6%	93.2%
Age Group				
18-24	79.5%	83.4%	76.6%	73.3%
25-34	93.9%	96.8%	96.6%	93.4%
35-44	96.4%	100%	97.7%	87.8%
45-54	96.7%	98.7%	94.7%	94.1%
55-64	94.3%	97.8%	93.6%	89.7%
65-74	95.4%	95.7%	94.5%	78.9%
75+	83.1%	82.4%	75.9%	79.2%

Table 34b: Women Who Had Pap Test With in The Past Two Years

Year	1993-1995	1996-1998	1999	2000
Annual Household Income				
Less than \$10,000	84.4%	88.4%	94.7%	82.4%
\$10,000 - \$15,000	74.2%	79.3%	86.4%	82.5%
\$15,000 - \$20,000	87.7%	86.5%	67.4%	75.3%
\$20,000 - \$25,000	82.7%	83.4%	87.6%	78.2%
\$25,000 - \$35,000	94.3%	85%	90.4%	87%
\$35,000 - \$50,000	90.5%	85.1%	89.1%	89.1%
\$50,000+	88.1%	86.2%	92.9%	93.6%
Age Group				
18-24	100%	99%	97.9%	100%
25-34	92.5%	92.1%	91.7%	97.9%
35-44	91.1%	75.6%	88.3%	92.5%
45-54	86.9%	86.8%	84.1%	85.4%
55-64	70.5%	80%	89.4%	80.2%
65-74	72.9%	68.5%	68.2%	69.9%
75+	50.4%	57%	65.5%	50.4%